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13. ABSTRACT (Maximum 200 words)

Comparison of man-made noise models against recently acquired man-made noise data measured on circular disposed antenna arrays (CDAA) at the receive sites of communication stations at Adak, AL; Diego Garcia; Guam, Honolulu, HI; San Diego, CA; and Stockton, CA is reported. These measurements were made by the Naval Electronics Engineering Activity, Pacific (NEEAP) on their Automated Noise Measurement System (ANMS). Baseline noise data were provided by NEEAP for the forenamed sites measured by the ANMS for the local noon period. Local noon was chosen as the most likely time of day man-made noise would most likely be present.

The data for Guam was compared to other measured results (Shepherd et al., "MF and HF Man-made Radio-Noise and Interference Survey—Guam," Final Report, SIR Project 3328, Stanford Research Institute, 1974). There was a large difference between these two measurements partially due to the measurements by NEEAP being made on a CDAA type antenna rather than on a standard short vertical rod. Using conversion factors obtained by Hagn in Iceland (Hagn, G. H., "Calibration of Nine-foot Rod Antenna for MF and HF EMC Measurements and Comparison with AN/FRD-10 Antenna; Volume I: Groundwave," Final Report, SRI Project 6972, Stanford Research Institute, 1978), the noise data was converted to that of a nine foot vertical rod. The results of this conversion are presented along with curves for rural, quiet rural, and galactic noise.

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E3-2 RECENT MAN-MADE RADIO NOISE MEASUREMENTS

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